

MEMORANDUM

TO: Jay Grussing, Data Analyst
FROM: Peter Spindelov, Oregon Department of Environmental Quality
DATE: March 27, 2008

SUBJECT: Proposed Benchmark 84 Targets for 2010 and 2015

We have new goals for 2010 and 2015, but it will not be easy to reach them.

Oregon has two laws that set goals regarding waste generation and recovery. Since waste generation is equal to the total waste recovered and the total waste disposed, then the two goals for generation and for recovery designate what the goal for disposal should be.

The waste generation goal is that starting in 2005, the per-capital generation of solid waste shall not show an annual increase, and starting in 2009, the absolute tons of solid waste generated shall not show an annual increase. The recovery goal is that by 2009, the recovery of materials from solid waste shall be at least 50%. Because the generation goal is for the absolute tons of solid waste generated to not increase starting in 2009, that means that as the population increases, the per-capita waste generated must go down proportionately to the increase in population. Using reasonable population growth estimate and data on solid waste disposal and recovery, we calculate that the goal for per-capita disposal shall be no more than 1,533 pounds per person per year by 2010, and 1,436 pound per person per year by 2015. I think two years ago we had originally set a goal of 1,567 pounds per person per year of disposal for 2010. There are two reasons why our new calculations come out with a lower number for 2010 than we originally published:

- 1) We corrected an error in calculating the tonnage of material recovered in 2004, double-counting thousands of tons of newspaper and other papers that were reported by two related companies. This lowered the total tons generated for 2004, thus lowering the bar on waste generation for subsequent years.
- 2) The growth of population for 2006 and 2007 was faster than predicted by earlier state projections. Faster increase in population while holding waste generation constant as of 2009 means the pounds generated per person per year must decrease in proportion to the increase in population in order to meet the goal.

In the target setting protocol, it states that targets should be "ambitious but realistic". In fact, the goals stated here will be very hard to achieve. There are many factors influencing the tons of waste generated (and disposed), with economic conditions playing a particularly large role; the better the economy, the larger the amount of construction and other waste being generated. The strong economy over the past few years has correlated very closely with large increases in per-capita disposal. At a time when our goals call for disposal to show small decreases, actual disposal has in fact increased greatly, rising from 1,636 pounds per person in 2004 to 1,764 pounds per person in 2006.

In spite of the fact that it will be difficult to achieve the targets stated here, we cannot see a reason to set a more lenient target, since any more-lenient result would mean that we failed to meet one or both of the statutory goals.

One of your questions concern how much does achieving the target depend on the efforts of your agency (DEQ), and how much does it depend on the efforts of others. The answer is that these are statewide goals, and not Oregon DEQ goals. Our agency, other agencies, and the public all have roles in achieving the goals. DEQ can influence some actions to head us to these goals, but we do not have the methods and the statutory authority to assure compliance with the goals

	Population (note 1)	Waste Generation (note 2)		Total Recovery Rate (note 3)	Recovery tons with credits	Statewide Recovery Credit (note 4)	Calculated Recovery Rate (note 5)	Per capita disposal	Marion energy tons	(without Marion credit) (note 6)			
		Disposed	Recovered										
			2417355										
2004	3,582,600	2,919,779	2,305,066	2,917	5,224,845	47.87%	2,680,704	3.75%	44.12%	1,630	11155	1,636	
2005	3,631,440	3,026,457	2,510,914	3,050	5,537,371	49.11%	2,921,037	3.77%	45.34%	1,667	11451	1,673	
2006	3,690,505	3,234,619	2,519,344	3,118	5,753,963	47.55%	2,931,958	3.76%	43.78%	1,753	20579	1,764	
2007	3,745,455	3,026,006	2,436,346	2,917	5,462,352	48.36%		3.76%	44.60%	1,616	13918	1,623	
2008	3,799,500	3,024,342	2,516,829	2,917	5,541,171	49.18%		3.76%	45.42%	1,592	13918	1,599	
2009	3,852,600	2,979,014	2,562,157	2,877	5,541,171	50.00%		3.76%	46.24%	1,546	13918	1,554	
2010	3,905,200	2,979,014	2,562,157	2,838	5,541,171	50.00%		3.76%	46.24%	1,526	13918	1,533	2010 Proposed Target
2011	3,957,400	2,979,014	2,562,157	2,800	5,541,171	50.00%		3.76%	46.24%	1,506	13918	1,513	
2012	4,009,200	2,979,014	2,562,157	2,764	5,541,171	50.00%		3.76%	46.24%	1,486	13918	1,493	
2013	4,061,700	2,979,014	2,562,157	2,728	5,541,171	50.00%		3.76%	46.24%	1,467	13918	1,474	
2014	4,114,868	2,979,014	2,562,157	2,693	5,541,171	50.00%		3.76%	46.24%	1,448	13918	1,455	
2015	4,168,732	2,979,014	2,562,157	2,658	5,541,171	50.00%		3.76%	46.24%	1,429	13918	1,436	2015 Proposed Target